Claims.

1. A process for the manufacture of a composition comprising a copp r compound supported on a transition alumina comprising impregnating a porous transition alumina support with an aqueous solution of a copper ammine carbonate complex, draining off any excess of the impregnating solution, and then heating the impregnated support to a temperature above 80°C to decompose the complex thereby depositing a basic copper carbonate compound on the surfaces of the pores of the transition alumina support.

2. A process according to claim 1 wherein the transition alumina is gamma or theta alumina.

3. A process according to claim 1 or claim 2 wherein the transition alumina support is preformed into shaped units having a minimum dimension of at least 1 mm.

4. A process according to claim 3, wherein the transition alumina units have maximum and minimum dimensions in the range 1 to 15 mm.

5. A process according to any one of claims 1 to 4 wherein, after heating the impregnated support to decompose the copper ammine carbonate complex, the support is given one or more further impregnations of with the copper ammine carbonate complex solution.

6. A process according to any one of claims 1 to 5 wherein the impregnated support is heated to a temperature above 250°C to decompose the basic copper carbonate to copper oxide.

7. A process according to any one of claims 1 to 6 wherein, after heating the impregnated support to decompose the copper ammine carbonate complex, the copper compound is reduced to elemental copper to give a composition having a copper surface area above 40 m^2 per gram of copper.

8. A process according to any one of claims 1 to 7 wherein the amount of copper ammine carbonate complex employed is such that the copper to aluminium atomic ratio is in the range 0.025 to 0.5.

9. A composition comprising a copper species and porous transition alumina, said composition having a copper to aluminium atomic ratio in the range 0.14 to 0.5 and having, upon reduction of the copper species with hydrogen at 250°C, a copper surface area of at least 60 m^2 per gram of copper.

9. Shaped units according to claim 8 having a BET surface area above 80 m^2/g.

10. Shaped units according to claim 8 or claim 9 having a copper to aluminium atomic ratio of at least 0.16.